

IN THE SPECIFICATION

Please amend the paragraph beginning at page 11, line 1 as follows:

FIGURE 2 diagrammatically illustrates pertinent portions of an exemplary embodiment of a wireless packet receiving station which can implement the optimal receiver represented by Expression 2 above. In FIGURE 2, a conventional receiver at 20 uses conventional techniques to receive incoming packets transmitted over the wireless communication link 15 by the packet transmitting station of FIGURE 1. A packet decoder is coupled to the receiver 20, and can use conventional techniques to decode N transmissions of a given packet. The N decoded packets, respectively including the N received sequences r_1 - r_N , are stored in a buffer 22. The receiver 20 includes a SNR estimator 21 which can use conventional techniques to estimate the SNR associated with each of the N received packets. The estimated SNRs, designated $SNR_1 - SNR_N$, are also input to the buffer 22. The received sequences r_1 - r_N and their corresponding SNR estimates SNR_1 - SNR_N are input to a look-up table 23. Also input to the look-up table 23 are all possible transmitted bit sequences, designated as $x(i)$ in FIGURE 2. If the transmitted sequence is known to be K bits long, then there are 2^K possible transmitted sequences. Thus the index i in $x(i)$ can take integer values from 1 through 2^K , one value for each possible transmitted sequence. For each of the 2^K possible transmitted sequences represented by $x(i)$, N corresponding probabilities are (stored in and) obtained from the look-up table 23, one probability for each of the N packets.